

## PATENT ABSTRACTS OF JAPAN

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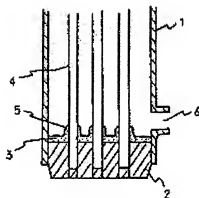
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## (54) MEMBRANE MODULE OF HOLLOW FIBER TYPE

## (57)Abstract:

PURPOSE: To prevent leakages through the boundary surfaces of hollow fibers and their epoxy resin sealing layer by providing a protection layer on the outer periphery of the hollow fiber to cover the aforesaid boundary surfaces in such manner that a part thereof is raised to a specific height along the outer periphery of the adjoining hollow fiber.

CONSTITUTION: Hollow fibers 4 are provided which are adhesively sealed at their ends by epoxy resin 2. A protection layer 3 consisting of polyurethane resin and having an elongation rate of not less than 10% is provided on the outer periphery of the hollow fiber 4 in such manner that the projection layer covers the boundary surfaces of the epoxy resin and the hollow fiber with a part 5 thereof raised to a height of not less than 1mm along the outer periphery of the adjoining hollow fiber 4. As a result, the boundary surfaces of the hollow fiber and the epoxy sealing layer are reinforced, thereby permitting a reduction in the occurrence of the leakages due to an external force.



## LEGAL STATUS

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